

# CSCI 3753: Operating Systems

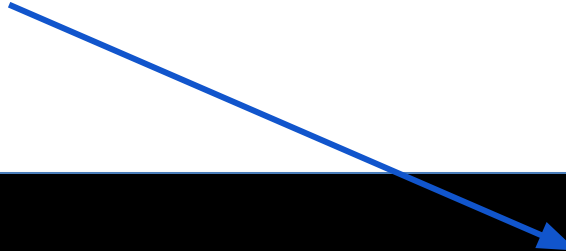
Week 9  
October 24th, 2025






University of Colorado **Boulder**

# Announcements

- PA6 due Sunday at midnight!
- Quiz 9 due at midnight tonight!
- As always recitation materials are stored here



# On-Going

- PA4 
  - Create a shared array
- PA5 
  - Create a DNS resolver
- PA6 
  - Combine these to create a multi-threaded DNS resolver

**Bounded Buffer Problem!!**



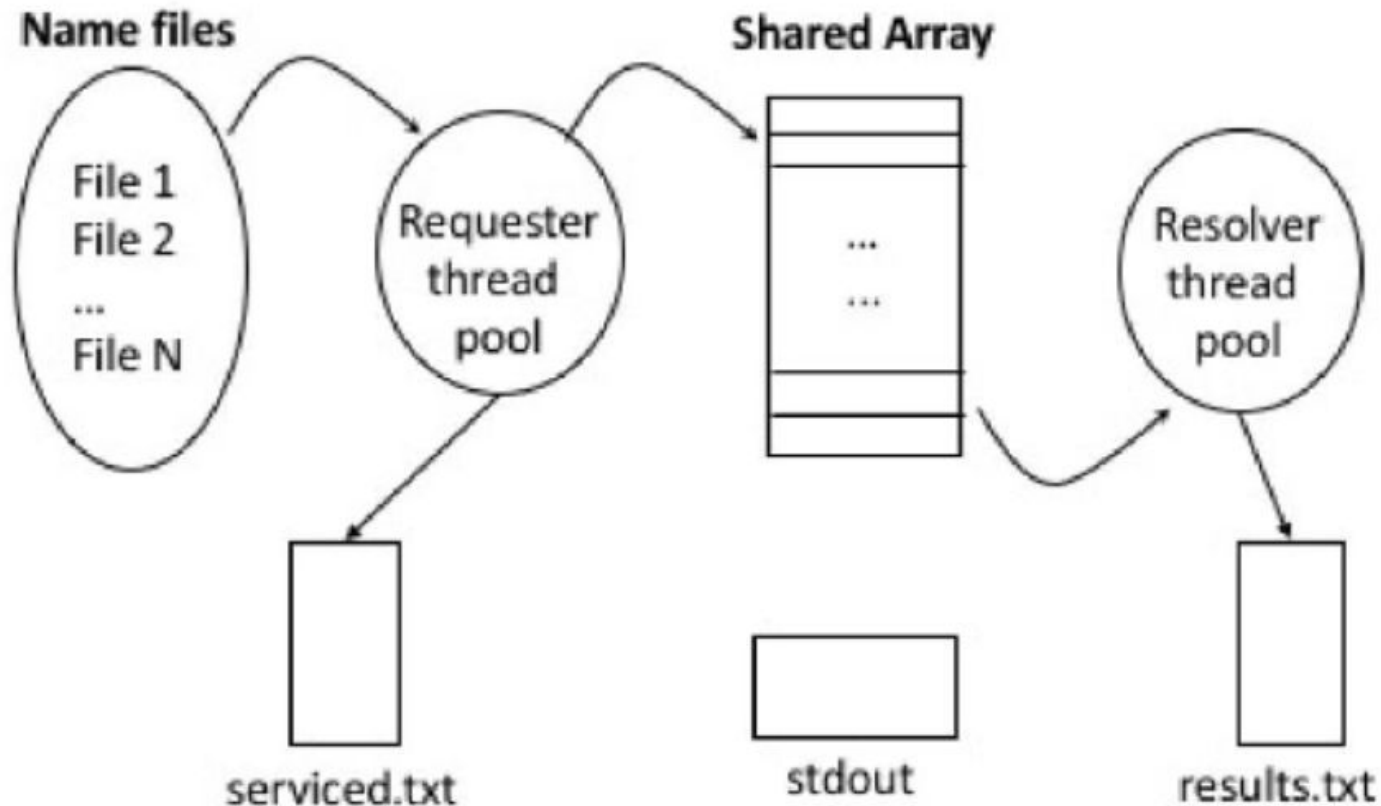
# PA6

- multi-threaded DNS resolver
  - multi-lookup <# requester> <# resolver> <requester log> <resolver log> [ <data file> ... ]
    - <# requesters> number of requestor threads to place into the thread pool
    - <# resolvers> number of resolver threads to place into the thread pool
    - <requester log> name of the file into which requested hostnames are written
    - <resolver log> name of the file into which hostnames and resolved IP addresses are written
    - <data file> filename to be processed. Each file contains a list of host names, one per line, that are to be resolved





# PA6 Diagram



# PA6 Problem Areas

- Keeping track of files worked
  - Ideas?
- How to exit resolver threads gracefully?
  - thoughts?



# PA6 Problem Areas

- Keeping track of files worked
  - Second shared array for file names
- How to exit resolver threads gracefully?
  - Poison pill method

